

HOW TO DEADEN SOUND THROUGH Floors – Walls – Ceilings



Easy Cut and Glue



Maintain 3/16” Spacing Between Panels
Read All Instructions Carefully



Nail and Finish Floors and Walls

INSTALLATION INSTRUCTIONS

HOMASOTE®

*Sensible. Sound.
Solutions.*



440 SoundBarrier® and N.C.F.R.® Homasote®

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Packaging, Storage and Protection

All Homasote products having a maximum 4’ width are packaged in plastic covered units. However, when stored outside, all materials should be stored above grade on wooden pallets and covered by waterproof tarpaulins. Packaging material is not intended for exterior job site protection.

Interior Applications

General Requirements: Temperature and humidity conditions closely approximating those which will exist when building is occupied shall be maintained before, during, and after the application of panels. **Installation shall not be made when building is excessively dry, cold, hot or damp.** All panels shall be removed from plastic covered units and separated not less than 24 hours prior to installation to allow material to acclimate.

Applications as a Floor Underlayment

During installation, leave a 3/16" space between each panel. All panels must be spaced 3/8" from all walls and partitions at all times. This will allow for the natural expansion and contraction of the Homasote panels. On runs over 50’, provide 1/2" expansion joint. All panel joints must be staggered regardless of panel size. When installing, hold annular threaded nails or screws back a minimum of 3/4" from all panel edges.

Applications as a Wall Panel

Homasote panels should be applied vertically to the framing with blocking or plates at top and bottom of panel. **All edges of panel must fall on framing at all times. If an edge does not fall on any framing, then blocking must be installed. Framing for 1/2" thick panels must not exceed 16" o.c. Framing for 5/8" and 3/4" thick panels must not exceed 24" o.c. During installation, all panels must be installed vertically leaving 1/8" expansion gap between sheets and 1/4" expansion gap at floor, ceiling, and around window and door frames, etc. Do not fill or tape panel joints. Vertical installation only. If left exposed 440 SoundBarrier may be painted with a quality latex based primer and finish paint applied by brush and/or roller. DO NOT SPRAY PANELS.**

F

FLOORING APPLICATION

Over Wood Sub-Floor

Wood sub-floor must be flat (not cupped), dry lumber, level and securely fastened to joists. Shim or sand sub-floor as necessary to provide flat surface continuity for Homasote panels.

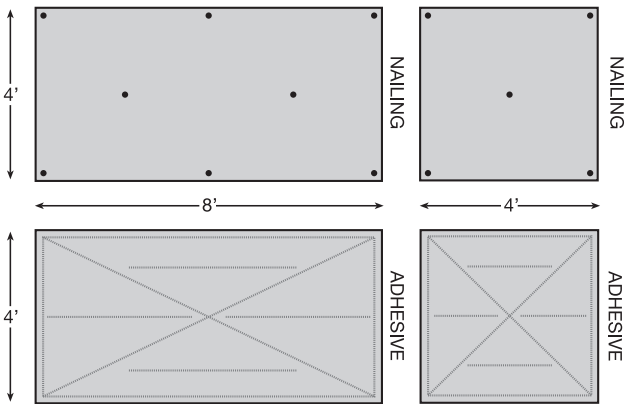
Note: Performance Specifications AFG-01 (developed by APA – The Engineered Wood Association) requires that glues applied at the job site be sunlight resistant, strong under many moisture and temperature conditions, and able to fill gaps.

F-A. Homasote installations for use with Carpet and Pad – Method 1

- Homasote AND Tack strip installed directly to wood sub-floor.**
- 1/2" thick by 1-1/2" wide wood nailers shall first be nailed and/or glued to wood sub-floor at all locations where tackless strips are to be used.
Note: 1/2" tack-strip shims are available and may replace wood nailers around perimeter of room for attachment of carpet and pad. Contact your local flooring dealer for more details.
 - Apply a 3/8" bead of APA-approved sub-floor adhesive meeting APA AFG-01 specification to Homasote panel, holding back 3/4" from panel edge, as shown in the "Glue-Nail/Screw Pattern Over Wood Sub-floor" below.
 - Turn Homasote panel over and place adhesive side down to wood sub-floor.

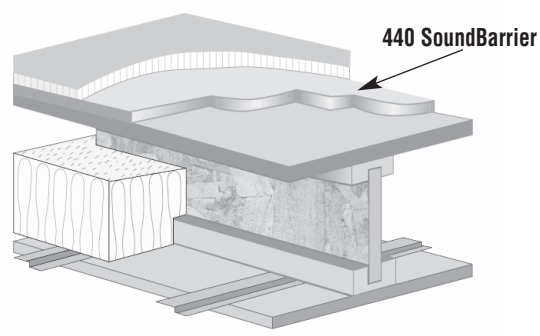
- Follow immediately with nailing or screwing of Homasote panel to wood sub-floor; from the center out, using annular threaded nails or screws of sufficient length to penetrate a minimum of 1/2" into wood sub-floor. Nail or screw as shown in the "Glue-Nail/Screw Pattern Over Wood Sub-floor" below. Nail or screw Homasote panel additionally in any areas that are not lying down flat into adhesive.
Note: If adhesive is omitted, panels must be nailed or screwed 6" o.c. along panel edges and 10" o.c. throughout the field of the board.
- Follow with next panel, leaving 3/16" expansion space between panels and 3/8" off walls and partitions at all times. Allow time for the adhesive to set, consult adhesive manufacturer's instructions for setting times as the setting times may vary.
- Nail tackless strips to the top of wood nailers, followed by the installation of carpet and pad.

“Glue-Nail/Screw Pattern over Wood Sub-floor”



F-B. Homasote installations for use with Carpet and Pad – Method 2

- Homasote installed to wood sub-floor.
Tack strip applied directly to Homasote.*
- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad –Method 1."
 - 2) Install tack strips directly to Homasote panel using annular threaded nails or screws sufficient in length to penetrate through the Homasote and 1/2" into wood sub-floor.
 - 3) Install carpet as per carpet manufacturer's installation instructions.
- Note: Contact your local flooring retailer for more information on "tack-strip nail extensions" for application of tack strips.



F-C. Homasote installations for use with glue-down applications such as: Vinyl, Luxury Vinyl, Linoleum, Glue-down Wood Strip Flooring, Wood Parquet, and Glue-down Carpet

- Homasote installed to wood sub-floor*
- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad – Method 1."
 - 2) Apply 1/4" or greater thickness APA-approved plywood of suitable underlayment grade over Homasote panel, staggering the joints. 1/4" plywood is not required under Luxury Vinyl Flooring of 4mm thickness or greater.
 - 3) Attach the 1/4" plywood over Homasote panel, assuring that plywood joints do not coincide with the Homasote joints. Follow the plywood manufacturer's recommended method and pattern of attachment, making sure that mechanical fasteners are of sufficient length to penetrate through Homasote panel and into wood sub-floor a minimum of 1/2".
 - 4) Install finish floor covering in strict accordance with manufacturer's instructions.

Alternative application without 1/4" underlayment

Apply joint filler such as Sikaflex® 1C SL, Sonneborn® NP1 or Dash Patch® to fill gaps in the Homasote Panels. For further information see: "Suggested Joint Fillers" on the "Installation Instructions" page.

IF USING DASH PATCH®:

Apply dash patch a little over the height of the joint; allow material to set following manufacturer's installation instructions and then sand joints down flush with 440 Sound Board. The Homasote is now ready to accept finished flooring.

IF USING A ONE PART POLYURETHANE CAULK:

Pour or inject one part polyurethane caulk into the gaps between Homasote 440 Sound Board; then tool the caulk or run your finger along it to create a concave shape that is recessed from the top of the joint by 1/16" from the top of the joint. This will allow the caulk room to move flush with the surface of the 440 Sound Barrier as the board expands without creating a ridge under the finish floor. Allow time for the caulk to cure, consult caulk manufacturer's instructions for curing times as the setting times may vary. After curing, the Homasote is now ready to accept finished flooring.

F-D. Homasote installations for use with Tile Flooring

- Tile application with acoustical anti-fracture membranes*
- 1) Follow 2, 3, 4 and 5 of section A, "Homasote installations for use with carpet and pad-Method 1", but screw and glue with one screw per square foot. Do not nail. Use 4'x4' panels only. Allow 24 hours for sub-floor adhesive to set before installing acoustical anti-fracture membrane.

- 2) Install acoustical anti-fracture membrane according to manufacturer's installation instructions.
- 3) Install thin-set, tile and grout according to manufacturer's installation instructions.

F-E. Homasote installations for use with Tile Flooring

- Homasote installed to wood sub-floor.
Tile NOT directly adhered to the Homasote panels.*
- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad – Method 1," but *screw and glue* with one screw per square foot. **Do not nail.** Use 4' x 4' panels only. Allow 24 hours for sub-floor adhesive to set.
 - 2) After a minimum of 24 hours, install cementitious backer board (or plywood or approved substrate) over Homasote panels. Install cement board in strict accordance with manufacturer's installation instructions. If plywood is used as underlayment, refer to "F-C Homasote installations for use with glue-down applications" for applying plywood over Homasote panels.
 - 3) Cementitious board must be installed following manufacturer's recommended method and pattern of attachment. Fasteners must be of sufficient length to penetrate through Homasote panels and into wood sub-floor a minimum of 1/2".
 - 4) Install tile flooring in strict accordance of tile manufacturer's installation instructions.

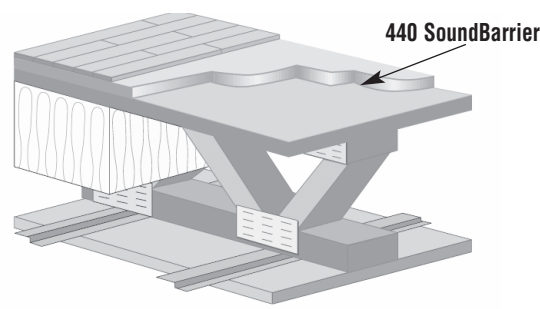
SPECIAL NOTE: Use 4'x4' panels only, screwed and glued to the wood sub-floor, with minimum 3/16" expansion joint on all sides.

F-F. Homasote installations for use with Tile Flooring

- Homasote installed to wood sub-floor, with tile adhered directly to 440 SoundBarrier – TCA Report # TCA-053-02 (A). Obtain the above-mentioned report from TCA or contact Homasote for a copy.*
- 1) Follow 2, 3, 4, and 5 of section A, "Homasote installations for use with carpet and Pad-Method 1," but *screw and glue* with one screw per square foot. Do not nail. Use 4'x4' panels only. Allow 24 hours for sub-floor adhesive to set.
 - 2) Use the Mapei® Granirapid System –Rapid Setting Flexible Latex Mortar System. Mix the system components according to the Mapei specifications.
 - 3) Apply mixed Mapei mortar (as directed in #2 above) to the Homasote in accordance with Mapei instructions for installation onto plywood sub-floors and underlayments.
 - 4) Use Bostik Hydroment® joint filler (sanded) with Multipurpose Acrylic (Mortar Admixture and Grout Additive) for grout. Tile and grout must be installed as per manufacturer's installation instructions.

F-G. Homasote installations for use with Finished Floating Floors such as: Wood Floating Floors, Laminate Floors and Luxury Vinyl Floors of 4 mm or greater

- Homasote installed to wood sub-floor.*
- 1) Follow 2,3,4,5 of "A. Homasote Installations for use with Carpet and Pad – Method 1."
 - 2) Install finished floating floor as per manufacturer's instructions.



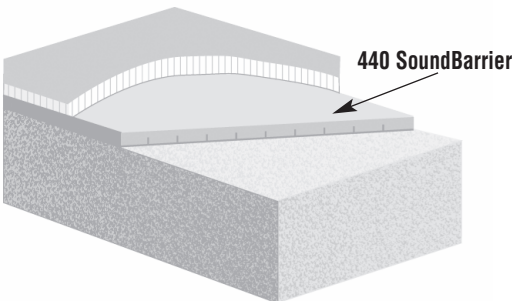
F-H. Homasote installations for use with Hardwood Flooring

Homasote installed to wood sub-floor.

- 1) Cut panels into 4' x 4's; leaving 3/16" gaps between adjoining panels and 3/8" from walls and partitions. Install Homasote panels to wood sub-floor. Use an APA-approved adhesive with annular-threaded (ring shank) nails or screws to secure Homasote panels to wood sub-floor. (Follow 2, 3, 4, & 5 of "A. Homasote installations for use with Carpet and Pad – Method 1" and "Glue-Nail/Screw Pattern Over Wood Sub-floor" as per Homasote's basic installation instructions over wood sub-floor).
- 2) Install hardwood flooring as per manufacturer's installation instructions. Attach hardwood flooring using 2" staples or cleats, sufficient in length to toenail through Homasote panels and penetrate sub-floor a minimum of 1/2". Follow the wood floor manufacturer's recommendations for nailing pattern.
- 3) In new construction, rosin paper or a minimum 15-pound felt paper should be placed over the Homasote panels when recommended by a hardwood flooring manufacturer.

Over Concrete Sub-Floor
Over Concrete Sub-Floor

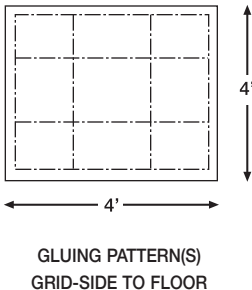
Prior to installation of any flooring component, a concrete sub-floor must be dry, clean, free of mildew and, unless suspended, integrally waterproofed, i.e. sealed. **ComfortBase™ is required for use on below grade application and new concrete. Using maximum 4' x 4' panels**, install Homasote panels following appropriate category in "Over Wood Sub-Floor," (top of page 2) based on finished flooring to be used, substituting concrete nails or fasteners in place of annular threaded (ring shank) nails.



F-I. Homasote installations over Concrete Slab for use with Finished Hardwood Flooring — on or above grade

Plywood/Homasote to concrete:

- 1) Concrete floor to be completely free of dust and debris.
- 2) Use an appropriate construction mastic to glue panels grid-side down, leaving 3/16" gaps between adjoining panels and 3/8" from walls and partitions. Apply the mastic using a 1/8"x1/8" notched trowel (35 sq. ft. pr gallon). To insure proper ComfortBase-to-concrete adhesion, especially in cold weather, panels may need to be weighted uniformly in order to enforce a strong bond between ComfortBase and the concrete slab.
- 3) Cut the 3/4" plywood or OSB into 4'x4' squares and stagger panel joints by 2'. Be sure to leave a 3/8" space at all wall lines and a 1/8" - 3/16" gap between ComfortBase panels. Cut subfloor to fit within 1/8" near and around door jambs and other vertical obstructions where finish trim will not be used. Glue down 3/4" T&G subfloor to the ComfortBase, staggering all joints. Apply a 3/8" bead of APA – approved sub floor adhesive meeting APA AFG-01 specification as shown in the "Gluing Pattern(s)".
- 4) Install the 3/4" finished hardwood floor according to the manufacturer's installation instruction over the plywood subfloor.



F-J. Homasote installations over Concrete Slab for use with Carpet and Pad

Refer to Homasote Comfort Base® as an alternative to 440 Sound Barrier® for placing on concrete. **In below grade applications, Comfort Base® must be used.**

- 1) Cover concrete slab with a layer of 4-6 mil. polyethylene or visqueen, overlapping seams a minimum of 6".
- 2) Install tack strips with shims (or wood nailer strips 1-1/2" x 1/2") along perimeter of area where carpet is to be installed. Tack strip must be installed into concrete using concrete fasteners.
- 3) Install Homasote panels leaving a 3/8" gap between panel and tack strip.
- 4) Fasten 4' x 4' Homasote panels to slab with power-actuated fasteners, securing the center of the panel first, then the edges, using five (5) fasteners per 4' x 4' panel. Place a fastener in each corner, holding back 3/4" from panel edge; place one fastener in middle of panel. Allow for 3/16" expansion gap between all Homasote panels.
- 5) Attach pad and carpet as per manufacturers instructions.

F-K. Homasote installations over Concrete Slab for use with Laminate or Floating Floor

Refer to Homasote Comfort Base® as an alternative to 440 Sound Barrier® for placing on concrete. **In below grade applications, Comfort Base® must be used.**

- 1) Cover concrete slab with a layer of 4-6 mil. polyethylene or visqueen, overlapping seams a minimum of 6".
- 2) Fasten 4' x 4' Homasote panels to slab with power-actuated fasteners, securing the center of the panel first, then the edges, using five (5) fasteners per 4' x 4' panel. Place a fastener in each corner, holding back 3/4" from panel edge; place one fastener in middle of panel. Allow for 3/16" expansion gap between all Homasote panels.
- 3) Install laminate or floating floor in strict accordance with flooring manufacturer's instructions.

Specifications

440 SoundBarrier			
Thickness	Sizes (nominal)*	Wt. (lbs. / sq. ft.)	R-Value
1/2"	4' x 4', 4' x 8', 4' x 10'	1.2	1.2
5/8"	4' x 8'	1.5	1.33
3/4"	4' x 8'	1.8	1.4

N.C.F.R

Thickness	Sizes (nominal)*	Wt. (lbs. / sq. ft.)	R-Value
1/2"	4' x 8'	1.5	0.85

* Actual length and width 1/8" shorter.

	440 SoundBarrier	N.C.F.R
Density (lb./cu. ft):	26-28	34-40
Flame Spread:	Class III (or C)	Class I (or A)
Tensile (Parallel):	450-700, psi	400-700, psi
Transverse M.O.R.	750-1000, psi	600-950, psi
Hardness (Janka ball)	230, lbs	275, lbs
Water absorption by vol.		
2 hrs. immerse	7%	7%

W1) Installation for use as a Sound Control Panel

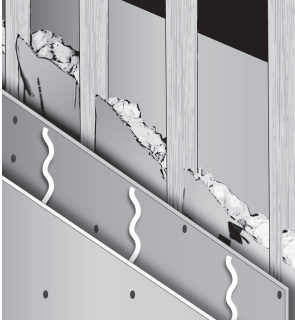
(behind gypsum wallboard or other paneling)

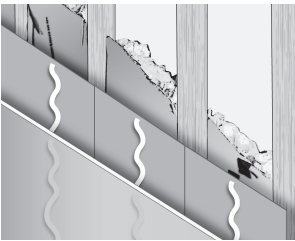
To reduce sound intensity, attention must be given to wall openings for conduits, pipes, ducts, electrical junction boxes and any other devices. Avoid back-to-back coincidence of openings on opposite sides of a wall. When the purpose of the openings has been completed, open spaces must be packed with acoustical insulation, or otherwise caulked, and sealed with a good grade acoustical sealant to assure an airtight closure.

Doorstops should be gasketed and dropseals installed at door bottoms. **Do not caulk between 440 SoundBarrier® panels.** This space allows for the natural expansion and contraction of the 440 SoundBarrier panels. 440 Sound Barrier panels must be installed vertically. After application of gypsum wallboard, the entire floor-ceiling wall perimeter must be caulked with acoustical sealant.

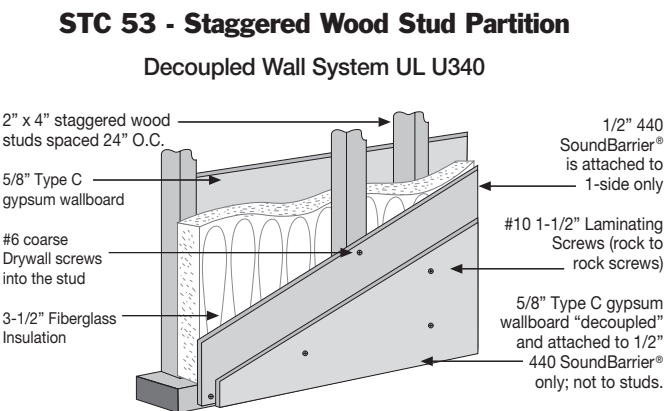
W-1-A) Decoupled Wall System – Reduced Sound Transmission on Wood or Steel Studs

- 1) Apply 440 SoundBarrier panels vertically to framing. Allow for expansion gaps as stated at the bottom of page 1. Using ring-shank nails or wood/metal drywall screws; attach. 12” o.c. along edges and 24” o.c. along all intermediate framing. Screws should be of sufficient length to penetrate 3/4” into framing. Hold screws 3/8” back from panel edges.


- 2) Apply 3/8” bead of adhesive to the 440 SoundBarrier that meets the specification APA AFG-01 (such as Liquid Nails or PL400) in single vertical beads that are in between the studs. Stagger gypsum wallboard so edges do not fall onto studs. Using rock-to-rock screws (#10 x 1-1/2” bugle head screws), secure gypsum wallboard directly to 440 SoundBarrier panels every 8” o.c. around panel edges and 12” o.c. on intermediate sections of panel. Do not fasten the gypsum wallboard into studs.

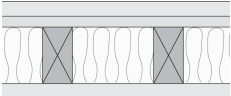
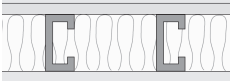


*Resilient channels or furring strips may also be installed over 440 SoundBarrier panels provided that the channels/strips are screwed through the 440 SoundBarrier into framing as per manufacturer’s recommendations.



W-1-B) Staggered Stud Wall Construction - STC 53

- 1) Construct staggered stud wall using a 2” x 6” sole plate and 2” x 4”s placed 12” o.c. alternating from side to side, resulting in studs on 24” o.c. on each side.
- 2) Install 3 ½” high fiber count sound batt insulation by weaving between the framing members. Rock wool (mineral wool) insulation is an optional material that can be installed in lieu of fiberglass insulation.

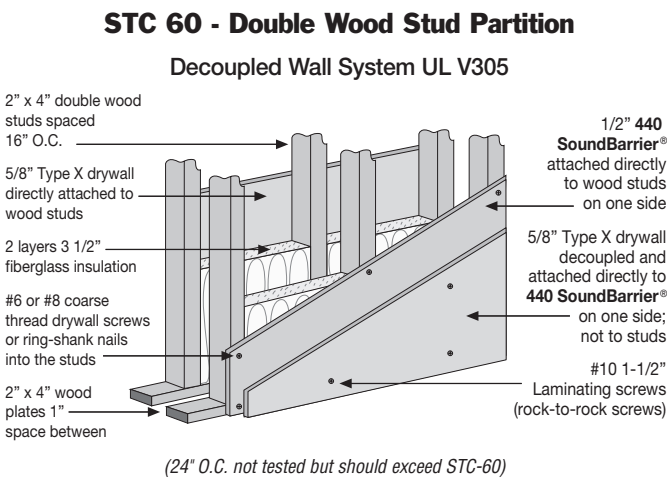
	Insulation	16” on Center Spacing	24” on Center Spacing
WOOD			
 5/8” Type C Wallboard 1/2” 440 SoundBarrier 2’ x 4’ Wood 5/8” Type C Wallboard	3” MW*	STC 53	STC 50
	3-1/2” FG*	STC 52	STC 50
STEEL			
 5/8” Type X Gypsum Wallboard 1/2” 440 SoundBarrier 3-5/8” 25ga Steel 5/8” Type X Gypsum Wallboard	3” MW* <i>or</i> 3-1/2” FG*	STC 54	STC 55
1 Extra Layer 5/8” Type X Wallboard	3” MW* <i>or</i> 3-1/2” FG*	STC 58	
2 Extra Layers 5/8” Type X Wallboard			STC 59

*MW = Mineral Wool; FG = Fiberglass

- 3) Apply 440 SoundBarrier panels following instructions in Section 1-A, Step 1.
- 4) Apply gypsum drywall following instructions in Section 1-A, Step 2.

W-1-C) Double Wall Construction - STC 60

- 1) Construct dual frame 2” x 4” placed 16” o.c. (24” O.C. not tested but should exceed STC-60)
- 2) Maintain a 1” dead air space separation between wall framing.
- 3) Install 3-1/2” high fiber count sound bat insulation in both sides of wall. Rock wool (mineral wool) insulation is an optional material that can be installed in lieu of fiberglass insulation.
- 4) Apply 440 SoundBarrier panels following instructions in section W-1-A, Step 1.
- 5) Apply gypsum drywall following instructions in section W-1-A, Step 2.



W-1-D) To Masonry Walls

- 1) As per APA recommendations, install wood furring strips, not exceeding 16” o.c. for 1/2” 440 SoundBarrier panels (furring strips not to exceed 24” o.c. for 5/8” and 3/4” 440 SoundBarrier panels).
- 2) Apply 440 SoundBarrier panels following instructions in section 2 of “1-A) To Wood or Metal Framing.”
- 3) Install gypsum wallboard or other paneling over 440 SoundBarrier panels so panel joints are staggered and do not coincide. Follow gypsum wallboard manufacturer’s installation recommendations.

W2) Installation for use as a Fabric-Wrapped Panel

440 SoundBarrier and N.C.F.R. Homasote panels have different textures on each side. One is a smoother linen texture and the other a rougher screen texture. Select the side to apply fabric that best suits your needs. Also notice that, due to the nature of the product, the surfaces of 440 SoundBarrier panels are not perfectly flat; determine the suitability of the panels as a substrate for your fabric prior to fabric application. (Apply fabric to a small sample, if necessary, to help make that determination). Lightly sanding the surface of the 440 SoundBarrier panels will help eliminate textures and inconsistencies. Monolithic fabric installations are not recommended. *Homasote 440 PINnacle™ and N.C.F.R. PINnacle™ are fine-sanded panels also used as a substrate for fabric wrapping. Homasote also offers factory-wrapped interior panels. Call Homasote Company for details.*

W-2-A) Fabric-Wrapped 440 SoundBarrier To Wood or Metal Framing

- 1) Apply fabric to 440 SoundBarrier panels using adhesive recommended by fabric manufacturer for application to wood fiberboard. The fabric adhesive must be applied to the face of the panel in the proper amount to prevent bleed-through. Wrap fabric and glue around edges and continue for 2" on backside of board. ***Homasote is not responsible for the appearance or performance of job-site fabric-wrapped panels.***
- 2) Lay panels flat for the necessary time to allow adhesive to fully set.
- 3) Apply a 3/8" bead of sub-floor adhesive meeting APA AFG-01 specification to intermediate studs in accordance with the adhesive manufacturer's recommendation.
- 4) Attach metal frame clips to long edges of 440 SoundBarrier panels every 12" o.c. See complete details in "2-D) Complete Instructions For Metal Frame Clips."
- 5) Apply fabric-wrapped 440 SoundBarrier panels to adhesive and framing, with recommended expansion gaps as stated at the bottom of page 1, applying hand pressure from the center of panel out to the ceiling and floor where adhesive is located to insure positive contact. Screw panels 6" o.c. to plates or blocking at floor and ceiling. Screws should be sufficient length to penetrate 3/4" into framing. Hold screws 3/8" back from edge of panels. Screw clips to framing and brace panels for a minimum of 24 hours for adhesive to set.

W-2-B) Fabric-Wrapped 440 SoundBarrier To Masonry Walls

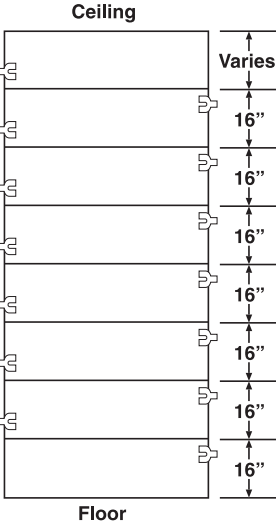
- 1) As per APA recommendations, install wood furring strips to masonry walls, not exceeding 16" o.c. for 1/2" 440 SoundBarrier panels and 24" o.c. for 5/8" and 3/4" 440 SoundBarrier panels.
- 2) Follow instructions "2-A) Fabric-Wrapped 440 SoundBarrier To Wood or Metal Framing" for applying fabric wrapped 440 SoundBarrier panels.

W-2-C) Fabric-Wrapped 440 SoundBarrier To Finished Walls

Apply wall panels following instructions in "2-A) Fabric-Wrapped 440 SoundBarrier To Wood or Metal Framing". Apply adhesive to back of 440 SoundBarrier panels in 3/8" beads 16" o.c. and at perimeter, holding adhesive back 3/4" from edge. 440 SoundBarrier panels must be aligned such that edges fall on framing and must be fastened into wall framing.

W-2-D) Complete Instructions For Metal Frame Clips*

- 1) Lay out back of panel by drawing lines at 16" intervals.
- 2) Locate clips above the line on one side and below on the opposite side. (A staggered clip layout creates a tongue-and-groove panel joint). See diagram (right).
- 3) Seat the clips around the perimeter of the board as shown in the diagram. Do not damage panel edge. (Use 7 clips per side for a 4' x 8' panels).
- 4) Apply a 3/8" bead of sub-floor adhesive meeting APA AFG-01 specification to intermediate studs in accordance with the adhesive manufacturer's recommendation. A double bead of adhesive is necessary on studs where adjoining panels fall.
- 5) Position panels (with clips installed) on any wood or metal framing. Tighten the joint with a floor leverage tool. Screw or nail panels to floor and ceiling plates as per 440 SoundBarrier installation instructions. Use low-profile screws to secure one series of clips to wall stud. Stagger joints on opposite sides of the wall when possible.
- 6) The clips on the adjacent panel simply slide behind the fixed panel.



*Source: Cymax Systems, Inc.

Notes:

Ceiling Construction

Provide framing or furring at maximum 16" o.c. regardless of 440 SoundBarrier® or N.C.F.R. Homasote® panel thickness. All panel edges must fall on framing members. The 8' side of the Homasote panel must be installed parallel to floor joists. If left exposed 440 SoundBarrier may be painted with a quality latex based primer and finish paint applied by brush and/or roller. DO NOT SPRAY PANELS.

Homasote Installed To Ceiling Joists

- 1) Screw Homasote panels into ceiling joists using standard drywall screws of sufficient length to penetrate a minimum of 3/4". Allow for 3/16" expansion joint at all Homasote edges. The 8' side of the Homasote panel must be installed parallel to floor joists.
- 2) Screw Homasote panels 4" - 6" o.c. along panel edges and 10"-12" o.c. at intermediate supports.
- 3) Install resilient channels (or equal) spaced 24" o.c. over Homasote panels. Use sufficient length screws to penetrate through the panels and into ceiling joists a minimum of 3/4".

- 4) Install gypsum wallboard to resilient channels as per manufacturer's installation instructions.

*If resilient channels are not installed, the gypsum wallboard must be installed, staggering all seams, over the Homasote panels and screwed into the ceiling joists as per gypsum wallboard manufacturer's installation instructions.

Resilient Channels Installed To Ceiling Joists

- 1) Install resilient channels (or equal), spaced a maximum of 16" o.c., to ceiling joists. Use sufficient length screws to penetrate into the ceiling joists a minimum of 3/4"
- 2) Screw Homasote panels using standard drywall screws directly into resilient channels. Allow for 3/16" expansion joint at all panel edges.
- 3) Screw Homasote panels 4" - 6" o.c. along panel edges and 10"-12" o.c. at intermediate supports.
- 4) Gypsum wallboard is to be installed, staggering all seams, over the Homasote panels and screwed into the resilient channels as per gypsum wallboard manufacturer's installation instructions.

440 SoundBarrier®

**DEADENS SOUND THROUGH
Floors • Walls • Ceilings • *Naturally!*
STRUCTURAL • INSULATING
100% ENVIRONMENTAL**



Easy Cut and Glue



Maintain 3/16" Spacing Between Panels
Read All Instructions Carefully



Nail and Finish Floors and Walls

440 SoundBarrier® SPECIFICATIONS

PART 1 GENERAL

1.1 Section Includes

- A. Sound-deadening acoustical flooring systems.

1.2 References

- A. ASTM E 84—test method for surface burning characteristics of building materials.
- B. ASTM D 1037—test methods of evaluating properties of wood-base fiber and particle panel materials.
- C. ASTM C209—Standard test methods for Cellulosic Fiber Insulating Board.
- D. UL Category BXUV: Mineral & Fiber Boards UL 1-Hour Fire Resistance assemblies.

1.3 Submittals

- A. Submit under provisions of section 01300.
- B. Product data: manufacturer's catalog data, detail sheets, and specifications.
- C. Quality assurance/control submittals:
 - 1. Manufacturer's installation instructions.

1.4 Quality Assurance

- A. Manufacturer's qualifications:
 - 1. Minimum 10 years experience in producing sound-deadening boards of the type specified herein.

1.5 Delivery, Storage, and Handling

- A. Deliver materials in manufacturer's original packages.
- B. Inspect the materials upon delivery to assure that specified products have been received.
- C. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- D. Store materials in a dry place, indoors, on raised platform protected from weather damage.

PART 2 PRODUCTS

2.1 Manufacturers

- A. Acceptable manufacturer: Homasote Company, 932 Lower Ferry Road, West Trenton, N.J. 08628. Telephone: 800-257-9491 or 609-883-3300, Sales Department, Ext. 1500, Technical Support, Ext. 1332, Fax 609-883-3497. Web site: www.homasote.com. For a local Homasote Company sales rep call the Sales Department, Ext. 1500.

- B. Requests for substitutions will be considered in accordance with provisions of section 01600.
- C. Substitutions: not permitted.
- D. Provide all sound-deadening boards from a single manufacturer.

2.2 Materials

- A. Sound-deadening boards: Homasote 440 SoundBarrier®; physical properties as follows:
 - 1. Thickness: 1/2 inch (13mm), 5/8 inch (16mm), 3/4 inch (19mm).
 - 2. Density: 26-28 pcf (416-448 kg/cubic m).
 - 3. Tensile strength: 450-700 psi (3,100-4, 830 kPa).
 - 4. Hardness (Janka Ball): 230 lbs. (104 kg).
 - 5. Water absorption by volume; ASTM C209:
 - a. 2 hour immersion: 7 percent maximum.
 - 6. Expansion, 50 to 90 percent relative humidity: 0.25 percent.
 - 7. R-value: 1/2 inch 1.2 (0.021), 5/8 inch 1.33, 3/4 inch 1.4.
 - 8. Flame spread: Class III (or C).
 - 9. Noise reduction coefficient: 0.20.

2.3 Accessories

- A. Adhesive: APA AFG-01 approved.
- B. Angular thread nails: length as required to penetrate a minimum of 3/4 inch (19mm) into sub-floor; 1 inch (25mm) into framing.
- C. Screws:
 - 1. Coarse thread drywall type wood screw, length as required to penetrate 3/4 inch (19mm) into sub-floor.

PART 3 EXECUTION

3.1 Examination

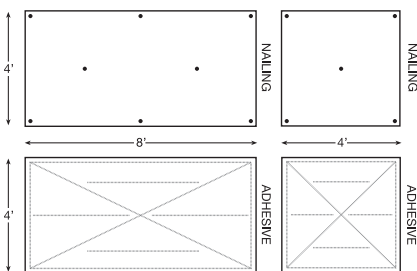
- A. Examine substrates upon which work will be installed.
- B. Verify framing member spacing complies with manufacturer's requirements depending on substrates and installation methods.
- C. Verify environmental conditions are, and will continue to be, maintained in accordance with manufacturer's recommendations.
- D. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates or conditions.
- E. Starting work by installer is acceptance of substrates and environmental conditions.

3.2 Preparation

- A. Follow manufacturer's instructions by separating and allowing Homasote 440 SoundBarrier® to be exposed to environmental temperature and humidity conditions for not less than 24 hours before start of installation.
- B. 440 SoundBarrier® panels must be installed in a clean, dry condition. DO NOT INSTALL WET PANELS. It is essential to make every effort to prevent water from ponding on installed panels. 440 SoundBarrier® panels must be thoroughly dry prior to closing in the structure.

3.3 Installation

- A. Follow manufacturer's instructions for cutting and installation of Homasote 440 SoundBarrier®.
- B. Over wood sub-floors: use 440 SoundBarrier®:
 - 1. Using all approved APA sub-floor adhesive meeting APA-AFG-01 specifications, apply a 3/8 inch bead of adhesive. Holding back 3/4 inch from panel edges and in an "X" pattern within the field as shown in the "nailing and adhesive pattern."



- 2. Allow 3/16 inch (4.7mm) space at panel joints, and 3/8 inch (9.5mm) space along walls and partitions.
- 3. Use proper length ring shank nails or screws to penetrate 3/4 inch (19mm) into sub-floor; 1 inch (25mm) into framing.
- 4. If omitting adhesive, panels must be nailed or screwed 6 inch o.c. along panel edges and 10 inch o.c. throughout the field of the board.
- 5. Hold back nails or screws 3/8 inch (9.5mm) from panel edges.

3.4 Adjusting and Cleaning

- A. Replace panels that cannot be repaired.



**Sensible. Sound.
Solutions.**

932 Lower Ferry Road, West Trenton, New Jersey 08628
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Sales Extension 1500 www.homasote.com sales@homasote.com
Technical Support: Extension 1332 techhelp@homasote.com

M3701-Oct_14

To make sure you have the most current installation instructions visit <http://www.Homasote.com/installation> to see if newer instructions are online. If online is newer, print out and use the Internet version. These instructions were printed October 2014.

